

REMARKS

Claims 1-39 are pending. Claims 12-29 are allowed. Claims 1-11 and 30-39 are rejected under 35 U.S.C. § 112, second paragraph. Claims 1-11 and 30-39 are rejected under 35 U.S.C. § 102(b) as being anticipated by Hur et al. (U.S. Pat. No. 6,201,436). Claims 1 and 30 are currently amended.

The drawings are objected to for not showing the first current limiter is programmable as recited by claim 3. Applicants respectfully disagree. Referring to Figure 3b, there is a first current limiter 310 as described at page 9, paragraph 33, of the instant specification. Therein, current sources I₂ and I₃ determine a first limit (clipping) value. Current sources I₂, I₃, and I₄ are preferably programmable in one embodiment of the present invention. (pages 9-10, paragraph 35). This programmable feature is shown at Figure 3b by the absence of a fixed current value for current sources I₂, I₃, and I₄ as shown in other exemplary embodiments of the present invention. The circuit of Figure 4a, for example, is the same as Figure 3b except that fixed current values of 20 μ A, 20 μ A, and 10 μ A are assigned to current sources I₂, I₃, and I₄, respectively. Also, by way of comparison, the current source I₁ of Figures 3b and 4a is marked with an arrow to indicate it is a variable input current source and not that it is programmable. (page 9, paragraph 32). Thus, applicants respectfully submit that Figure 3b does show that the first current limiter (310) is programmable, because controlling current sources I₂ and I₃ are not designated as fixed current sources and are explicitly described as programmable in the instant specification. Furthermore, any change to Figure 3b would only introduce confusion and conflict with other parts of the specification. Thus, applicants respectfully request withdrawal of the drawing objection.

Claims 1 and 30 and their respective depending claims are rejected under 35 U.S.C. § 112, second paragraph, for reciting "substantially." Claims 1 and 30 are amended to delete "substantially." Although applicants do not agree "substantially" renders claims 1 and 30 indefinite, applicants request entry of this amendment as it places claims 1-11 and 30-39 in a condition for allowance as will be explained.

Independent claim 1, as amended, recites "A current generator providing an output current comprising: a first current limiter coupled between an input current and the output current, the first current limiter generating *a first current having a first limit value*; and a second current limiter coupled between the input current and the output current, the second current limiter generating *a second current having a second limit value different than the first limit value*; and a node coupled to the first current limiter and the second current limiter wherein the output current is the sum of the first current and the second current, and wherein *the output current varies between the first limit value and the second limit value*."

Independent claim 30, as amended, recites "A method of limiting an output current, the method comprising the steps of: *limiting a first current to a first limit creating a first output current; limiting a second current to a second limit different than the first limit creating a second output current; and summing the first output current and the second output current to create the output current that varies between the first limit and the second limit*." (emphasis added).

Hur et al. fail to disclose the foregoing emphasized limitations. Referring to Figure 1 in particular, Hur et al. disclose that current I1 and mirrored current I4 are both proportional to temperature. (col. 7, lines 19-21). Hur et al. also disclose that current I3 and mirrored current I5 are inversely proportional to temperature. (col. 7, lines 28-30). Finally, Hur et al. disclose that the summed "current Ibias1 preferably is maintained constant regardless of changes in temperature." (col. 7, lines 32-37). Hur et al. fail to disclose first and second limits or an output current that varies between the first and second limits as required by claims 1-11 and 30-39. Thus, applicants respectfully submit that claims 1-11 and 30-39, as amended, are patentable under 35 U.S.C. § 102(b) over Hur et al.

Examiner previously rejected the foregoing argument with the following explanation.

The reference Hur et al. makes clear that current I2 is eight times greater than I1 and that transistor 22 is the same size as transistor 14, thus current I3 mirrors current I2. Further, the current mirror comprising transistors 21 and 31 [sic 32] operates inversely proportional to temperature. Therefore, current I5 is equal to or less than [sic] I3 depending on temperature. In other words the I5 has "limit value" of eight times greater than [sic] I1. Further, I4 is

disclosed as being a mirror or [sic] I1, therefore I5 has "limit value" of eight times greater than [sic] I4. (Office Action 3/16/05, page 4, second paragraph).

Applicants do not disagree with Examiner. Assume the first limit of claims 1 and 30 is taken as $I5 \leq I3$ or $I5 \leq 8 \cdot I1$ as stated by Examiner. Then the second limit is $I5 \leq 8 \cdot I4$. But $I4 = I1$. So the second limit is $I5 \leq 8 \cdot I1$. Thus, the first and second limits proposed by Examiner are the same. But both claims 1 and 30 state that the second limit is different than the first limit. Thus, claims 1-11 and 30-39, as amended, are patentable under 35 U.S.C. § 102(b) over Hur et al.

In view of the foregoing, applicants respectfully request reconsideration and allowance of claims 1-11 and 30-39. If the Examiner finds any issue that is unresolved, please call applicants' attorney by dialing the telephone number printed below.

Respectfully submitted,



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